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ANNUAL REPORTS for 1940 and 1941

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To the Chairman and Members

OF

Sutton-in-Ashfield Urban District Council

Ladies and Gentlemen,

The essential records for the years 1940 and 1941 are summarised in this report, which includes the report of the Chief Sanitary Inspector.

The outbreaks of diphtheria in 1940 are described in some detail. It is hoped that the immunisation campaign sponsored by the Ministry of Health and actively supported by the Sutton-in-Ashfield Urban District Council will make such epidemics of historic interest only.

Adequate housing accommodation remains the greatest single requirement of the population. The problem has long engaged the serious attention of the Council, but present conditions preclude effective action. Schemes are ready for immediate execution as soon as the Minister of Health is able to give his sanction. Nevertheless, it is important that the plans be kept up to date so that, when building is sanctioned, not only will areas be properly planned but the houses will be modern in design and not already obsolete before even the foundations are laid.

My thanks are due to the members of the Council for their support in all proposals likely to benefit the public health, and I owe to them an apology for the more than belated appearance of this report.

I again record my appreciation of the assistance given to me by all the members of the staff.

Your obedient Servant,

T. S. McKEAN, M.B., ChB., D.P.H.

Medical Officer of Health.

PUBLIC HEALTH OFFICERS.

Medical Officer of Health (Part time)—
T. S. McKEAN, M.B., Ch.B., D.P.H.

Medical Officer to Maternity and Child Welfare Clinics—
J. R. HUNTER, M.B., Ch.B.

Medical Officers to Ante-Natal and Post-Natal Clinics—
W. J. CANDLISH, M.D., D.C.O.G.
H. T. TATE, M.B., Ch.B., D.C.O.G., M.M.S.A.

Obstetric Consultant —
H. J. MALKIN, M.D. (Lond.), F.R.C.S. (Edin.) F.C.O.G.

Consultants under Puerperal Fever and Pyrexia Regulations—
H. J. MALKIN, M.D. (Lond.), F.R.C.S. (Edin.), F.C.O.G.
A. M. WEBBER, M.B., M.S., F.R.C.S.
M. GLEN BOTT, M.B., B.S. (London).

Health Visitors—
Miss M. FOX, S.C.M.
Miss E. A. CHAMBERS, S.R.N., S.C.M.
Miss E. JEFFRIES, S.R.N., S.C.M.

Chief Sanitary Inspector—
J. T. UNWIN, F.S.I.A., M.R.San.I., R.S.I. Meat I. Cert.

Additional Sanitary Inspectors—
S. N. PYCROFT, M.S.I.A., R.I.S. Meat I. Cert. (to Sept., 1941).
G. M. LAWTON, M.S.I.A., R.S.I. Meat I. Cert.
S. F. BAYLEY, M.S.I.A., R.S.I. Meat I. Cert.

Clerks—
Miss M. SEVERN.
Miss D. WHITEHEAD.

SECTION A.

STATISTICS AND SOCIAL CONDITIONS.

	1940.	1941.
Area (in Acres)	10,506	10,506
Population (estimated mid-year)	37,180	37,320
Number of Inhabited Houses	10,811	10,800
Rateable Value (31st March)	£162,438	£161,052
Sum Represented by a Penny Rate (Gross)	£677	£671

Vital Statistics.

	1940.			1941.		
	Total.	M.	F.	Total.	M.	F.
Live Births—Legitimate	611	323	288	633	339	294
Illegitimate	25	11	14	22	11	11
Still Births	37	24	13	38	22	16
Deaths	477	245	232	421	228	193

	1940.	1941.
Birth Rate (per 1,000 Population)—Legitimate	16.4	16.9
Illegitimate	0.67	0.59
Still Birth Rate (per 1,000 total Births)	55.0	54.8
Death Rate (per 1,000 population)	15.1 (corrected)	11.28 (crude)

Deaths from Puerperal causes.

	Deaths.	Rate per 1,000 Births.	Deaths.	Rate per 1,000 Births.
Puerperal Sepsis	1	1.5	0	0
Other Puerperal Causes	0	0	1	1.4
	1	1.5	1	1.4

Deaths of Infants under one year of age;—

	1940.	1941.
All Infants per 1,000 Live Births	58.1	66.8
Legitimate per 1,000 Legitimate Births	60.5	67.5
Illegitimate per 1,000 Illegitimate Births	0.0	45.4

Special Death Rates per 1,000 Popuation:—

	1940.	1941.
Cancer (all ages)	1.2	1.3
Measles (all ages)	0.0	0.0
Whooping Cough (all ages)	0.0	0.1
Diarrhœa (under 2 years of age)	0.03	0.05

Chief Causes of Death:—

	No. of Deaths.	
Heart Disease	100	111
Cancer	45	49
Intra-cranial vascular disease	55	55
Tuberculosis—Pulmonary	16	15
Non-Pulmonary	5	4
Bronchitis	50	21
Pneumonia (all forms)	23	15

	1940.	1941.
	No. of Deaths.	
Deaths of Infants under one year of age:—		
(a) Under 14 days	19	21
(b) Over 14 days	18	23
	37	44
(a) Under 14 days:—		
Causes of Death—Prematurity	11	8
Congenital Malformation	0	5
Debility	1	3
Purpura	1	0
Cerebral Haemorrhage	1	0
Convulsions	1	5
Asphyxia Pallida	1	0
Asphyxia Livida	1	0
Atelectasis	2	0
	19	21
Deaths in Hospital (included above)	4	3
Mothers who had attended Ante-Natal Clinic	10	16
(b) Over 14 days:—		
Causes of Death—Broncho Pneumonia	6	7
Gastro Enteritis	0	1
Convulsions	2	2
Prematurity	2	2
Debility	2	4
Cerebro-Spinal Fever	1	0
Hydrocephalus	1	0
Suffocation	1	1
Bronchitis	2	0
Colitis	1	0
Rickets	0	1
Peritonitis	0	1
Congenital Malformation	0	1
Whooping Cough	0	3
	18	23
Deaths in Hospital (included above)	4	7
Mothers attended Ante-Natal Clinic	9	11
Infants attended M. & C. Welfare Clinics	7	14
Visited by Health Visitors	16	16
Number on free food, Clinic	1	0
Deaths under one month	23	24
Deaths over one month	14	20

The decrease in deaths from prematurity in 1941 was more than offset by the marked increase in fatal congenital malformations.

The death from rickets occurred in Hospital. The child was one month old.

Whooping cough accounted for three extra deaths in 1941.

The main increase in Infantile Mortality in 1941 was in children of one month and over. The general increase of 8 per 1,000 was twice that of England and Wales. The excess of our Infantile Mortality over the average for England and Wales, however, remains constant at about 7 per 1,000.

Year	Infantile Mortality		Birth Rate		Death Rate	
	Sutton	England and Wales	Sutton	England and Wales	Sutton	England and Wales
1935	63.4	57	17.3	14.7	11.9	11.7
1936	69.13	59	16.09	14.8	12.6	12.1
1937	69 98	58	15.30	15.58	13.37	12.4
1938	51.21	53	17.24	15.1	12.96	11.6
1939	57.29	50	16.2	15 0	14.2	12.1
1940	58.1	55	17.1	14.6	15 1	14.3
1941	66 8	59	17.5	14.2	*11.28	12.9

*Crude

Maternal Deaths.

One in 1940 followed an abortion, and the other in 1941 was due to Post-partum Hæmorrhage.

	England & Wales.	Smaller Towns.	Sutton-in-Ashfield.	England & Wales.	Smaller Towns.	Sutton-in-Ashfield.
BIRTHS:—	1940.	1940.	1940.	1941.	1941.	1941.
Live	14.6	15.7	17.1	14.2	16.4	17.5
Still	0.55	0.55	0.99	0.51	0.60	1.0
DEATHS:—						
All causes	14.3	12.8	15.1	12.9	13.0	11.28
Measles	0.02	0.02	0.0	0.03	0.03	0.0
Whooping Cough	0.02	0.02	0.0	0.06	0.06	0.1
Diphtheria ...	0.06	0.05	0.1	0.07	0.06	0.1
Influenza ...	0.32	0.30	0.31	0.19	0.20	0.1
NOTIFICATIONS:—						
Scarlet Fever ...	1.63	1.57	2.9	1.47	1.51	1.5
Diphtheria ...	1.16	1.21	2.6	1.25	1.19	1.47
Enteric Fever ...	0.07	0.10	0.11	0.12	0.12	0.05
Erysipelas ...	0.33	0.30	0.27	0.30	0.27	0.27
Pneumonia ...	1.20	1.00	0.46	1.25	1.04	0.47
Cerebro-Spinal-Fever	0.32	0.29	0.24	0.25	0.20	0.05
Measles	10.24	9.99	15.9	10.33	10.47	0.67
Whooping Cough	1.34	1.35	2.8	4.39	4.50	2.2

SECTION B.

GENERAL PROVISION OF HEALTH SERVICES FOR THE AREA.

Nursing in the Home	No change.
Ambulance	
Laboratory Facilities	

ANTE-NATAL, POST-NATAL, MATERNITY AND CHILD WELFARE AND IMMUNISATION CLINICS.

The following is the time table of the Clinics:—

Situation.	Maternity and Child Welfare.	Ante-Natal.	Post Natal.	Immunisation.
Sutton-in-Ashfield: Forest Street (Near Library).	Tuesdays and Fridays, 2—4 p.m. Dr. attends Tuesdays, at 2.30 p.m.	Every Wednesday, 1.30—3.30 p.m.	At Sutton Clinic, 2nd Monday in month, 2—4 p.m.	1st and 3rd Thursdays of each month, 2.30—3.30 p.m.
Huthwaite; Clinic, New Street.	Every Thursday, 2—4 p.m. Dr. attends 2nd and 4th Thursdays in month, 2.30 p.m.	2nd and 4th Fridays, 2—4 p.m.		4th Thursday of each month, 3.30 p.m.
Skegby and Stanton Hill: Baptist Church, Stanton Hill.	Every Monday, 2—4 p.m. Dr. attends 2.30 p.m.	1st and 3rd Fridays, 2—4 p.m.	2nd Wednesday in month, 2—4 p.m.	2nd Tuesday of each month, 2.30—3.30 p.m.

MATERNITY AND CHILD WELFARE

ATTENDANCES AT CLINICS

Clinic.	Year.	No. of Sessions.	New Cases.			Total Attendances.			Children seen by Doctor.
			Mothers.	Children. Under 1.	Children. 1-5 yrs.	Mothers.	Children. Under 1.	Children. 1-5 yrs.	
Sutton-in-Ashfield	1940	103	288	349	43	6957	5257	2283	1090
	1941	100	293	362	27	7213	5806	1958	837
Huthwaite	1940	50	68	87	10	2377	1716	891	385
	1941	50	68	83	11	2494	1758	971	290
Stanton Hill	1940	46	100	125	18	2376	2003	699	670
	1941	49	89	103	8	2370	2025	552	542
Skegby	1940	2	2	2	0	52	48	28	12
(Clinic closed February, 1940).									
Totals	1940	201	458	563	71	11762	9024	3901	2157
	1941	199	450	548	46	12077	9589	3481	1669

Percentage of notified live births represented by number of first attendances under one year:—1940—88%.
1941—83%.

MATERNITY AND CHILD WELFARE - VISITS

District No. Year	First Visits (1)							Re-Visits (2)					Visits to Expectant Mothers (3)					Special Visits (but included in 1 & 2	Total Visits
	INFANTS			CHILDREN				Infants	CHILDREN										
	Within 14 days of birth	Btwn 14 & 28 days of birth	Later than 28 days after Birth	Age 1-2	Age 2-3	Age 3-4	Age 4-5	Age 0-1	Age 1-2	Age 2-3	Age 3-4	Age 4-5	1st	2nd	3rd	4th	5th		
No. 1 ...1940	2	184	8					577	232	228	211	135	27	19				16	1639
1941		190	45					524	310	255	228	154	28	9				24	1767
No. 2 ...1940	64	103	1	4				542	355	255	201	195	33	19	3	2		6	1783
1941	11	115	24	2				380	291	152	106	93	26	7	1			4	1212
No. 3 ...1940	21	186		3	2			290	229	179	161	129	37	2	2			8	1249
1941	4	191	33	2	1	2	1	195	191	127	144	87	22					37	1037
Totals...1940	87	473	9	7	2			1409	816	662	573	459	97	40	5	2		30	4671
1941	15	496	102	4	1	2	1	1099	792	534	478	334	76	16	1			65	4016

ANTE-NATAL CLINICS.

Clinic	Year	No. of Sessions	New Cases	Total Attendances	Normal Cases	Abnormal Cases	Referred to Hospital
Sutton-in-Ashfield	1940	51	285	870	256	29	26
	1941	55	310	975	287	23	26
Huthwaite	1940	24	62	191	59	3	3
	1941	23	57	157	57	0	0
Stanton Hill and Skegby	1940	24	70	272	64	6	2
	1941	24	102	325	93	9	6
Totals	1940	99	417	1333	379	38	31
	1941	102	469	1457	437	32	32

Percentage of Total Notified Births represented by attendance:—1940, 62%; 1941, 68%.

Average attendance at all Clinics per Session:—1940, 13.5; 1941, 14.3.

POST-NATAL CLINICS.

Clinic	Year	No. of Sessions	New Cases	Total Attendances	Normal Cases	Abnormal Cases	Referred to Hospital
Sutton-in-Ashfield	1940	12	94	113	78	16	0
	1941	12	79	85	66	13	2
Huthwaite ... ... (Closed May, 1940)	1940	4	9	11	9	0	0
Stanton Hill	1940	12	30	50	22	8	0
	1941	12	40	61	30	10	2
Totals	1940	28	133	174	109	24	
	1941	24	119	146	96	23	4

Maternity Services.

	1940.	1941.
Maternity cases treated in Hospital	74	79
Cases seen by Consultant at Home	2	3
Maintenance Charges	£607 13 3	£536 6 0
Consultant Fees	2 2 0	3 3 0
Operation Fees	32 14 0	38 3 0
Consultant at Hospitals	21 0 0	3 17 0
X-Ray Examinations	7 17 6	
	£671 6 9	£581 9 0
Amount to be recovered according to Income Scale	352 10 10	372 1 11
Cost to Council	£318 15 11	£209 7 1
Amount recovered during year	£173 6 1	£175 6 11
Average attendance per case in Hospital ...	23 Days.	19 Days.

Institutional Provision for Mothers and Children.

No change.

Health Visitors.

Adequate home visiting is still impossible owing to the number of Clinics held regularly.

Clinics.

The closure of the Skegby Clinic did not materially affect the attendance of Skegby Mothers and Children, who now go to the Stanton Hill Clinic.

The decrease of 5% in attendances at all Maternity and Child Welfare Clinics was partly due to the Ministry of Food taking over from the Council the distribution of free milk.

It is surprising that there are any attendances at all at Stanton Hill Clinic, where the premises are totally unsuitable for their purpose.

Consultant Clinic.

In 1940 the Consultant to the Ante-Natal Clinic found it impossible to hold special sessions here. Cases referred for his opinion were therefore sent to see him at the Out-Patient Department of the Mansfield Hospital. This was the best arrangement possible, but has never proved very convenient or entirely satisfactory, and it is hoped that when conditions improve some more suitable alternative will be possible.

Under the new arrangement the Consultant is paid £14 14s. per annum instead of a sessional fee. A fee of 2s. 6d. per attendance is paid to the Mansfield Hospital.

Six cases were sent in 1940.

Five cases were sent in 1941.

Cases unable to attend the Hospital may still be seen by the Consultant in their Homes at the request of the Doctor in charge of the case.

Child Life Protection.

One case was on the register in 1940 and two cases in 1941.

Dental Treatment.

	1940.	1941.
Cases recommended for treatment	4	5
Number failed to attend	2	3
Treated, children under 5	1	1
Treated, expectant mothers	1	1
Total cost	£1 7 6	£8 3 4

Orthopædic Treatment.

	1940.	1941.
OUT-PATIENTS.		
Cases	35	37
Attendances	352	554
Cost	£44 0 0	£69 5 0
'Bus Fares	9 0	
Appliances	£1 14 0	£1 12 6
IN-PATIENTS.		
Admissions during year to Harlow Wood ...	4	1
Patients in Hospital 31st December	1	1
Cost to Council	£178 5 7	£129 13 1
Amount to be recovered according to Income Scale	£29 5 5	Nil
Amount of above paid	£4 7 6	

Prevention of Deafness.

	1940.	1941.
Number of Cases	4	8
Cases admitted free of cost	1	
Cases paying part cost	2	2
Cost to Council	£3 2 11	£2 3 9

Prevention of Blindness.

	1940.	1941.
IN-PATIENTS.		
Children	1	
Mother and Child	1	1
OUT-PATIENTS.		
Children	1	
Total Cost	£15 14 0	£3 4 0
Amount to be recovered under Scale	£4 12 6	10 8
Amount actually recovered	£4 3 4	10 8
Cost to Council	£11 10 8	£2 13 4

SCALE OF CONTRIBUTIONS FOR MATERNITY CASES, PREVENTION OF DEAFNESS, ORTHOPÆDIC and DENTAL TREATMENT.

(Operated from 1/4/41).

Deductions From Gross Income:—

1. CHILDREN.

1st	5/-
2nd	5/-
3rd	4/-
4th	4/-
5th	3/-
6th	3/-
each child over 6 ...	2/6

Where any of the children are over 21 years of age, an allowance of 10/- will be made for the first instead of the ordinary allowance, and 7/6 for any other children.

2. RENT. 3. TRAVELLING EXPENSES.

Where both parents live at home or the husband is serving in H.M. Forces.

After the above deductions have been made the Council will recover the following proportion of the total cost;—

NIL	when the income after deductions does not exceed	£1 5 0
One eighth ...	ditto	£1 10 0
One seventh ...	ditto	£1 15 0
One sixth ...	ditto	£2 0 0
One quarter ...	ditto	£2 5 0
One third ...	ditto	£2 10 0
One half ...	ditto	£2 15 0
Two thirds ...	ditto	£3 0 0
Three quarters	ditto	£3 5 0

The Total Cost when the income after deductions is over £3 5 0

For cases not covered by the table (when only one parent lives at home) the income limit is reduced by 7/6 in each grade.

MATERNITY CASES. To the amount payable on the above scale is added the total Maternity Benefit received by the Household.

METHOD OF PAYMENT. Accounts to be paid in one or more instalments as arranged by the Officer authorised to collect.

Supply of Milk.

FREE ISSUES. Income scale—no change.

	1940.	1941.
Value of Food issued	£594 9 7	£171 8 6
Income from charge of 6d. per tin	117 3 6	31 14 0
Total cost to Council	£477 6 1	£139 14 6
Issues for Infants and Children	93%	100%
Issues for Expectant Mothers	7%	Nil

NUMBER OF CASES ON FREE FOOD.

	Sutton.	Huthwaite.	Skegby & Stanton Hill.	Total.
31/12/1939	107	36	67	210
31/12/1940	32	7	12	51
31/12/1941	17	6	5	28

The very considerable decrease in the number of cases supplied with dried milk free of charge is due to the operation of Circular 2053, the effect of which was to transfer from the Local Authority to the Ministry of Food the responsibility for the issue of liquid or dried milk. This Scheme came into operation on the 1st July, 1940. The few cases still being supplied through the Clinics are Infants for whom a special Infant Food is required.

SALES.

	1940.	1941.
Sutton-in-Ashfield Clinics	£1,446 12 6	£1,844 17 5
Huthwaite Clinics	492 18 3	466 10 5
Stanton Hill Clinics	428 2 6	559 3 2
Totals	£2,367 13 3	£2,870 11 0

The amount of food sold continues to increase. Investigations are being undertaken to find whether there is in fact a progressive decrease in breast feeding, and, if so, to determine the cause.

Since 1937 the value of food sold has risen from £1,238 15s. 3d. to £2,870 11s. About 25% of the increase is due to the increased price of the milk.

SECTION C.

SANITARY CIRCUMSTANCES OF THE AREA.

Water Supply:

RUSHLEY.

Circular 2086A was considered by the Council on September 2nd, 1940.

A Wallace & Tierrian Chlorine Control Apparatus was installed and chlorination of the supply began on June 15th, 1941. As a result of complaints from consumers, the chlorine was reduced from 0.3 to 0.2 parts per million after the first week.

MEDEN VALLEY.

A gas plant by Bell Bros. was installed and the supply chlorinated from 10th September, 1940.

Analyst's Report.

Physical Characteristics.	Rushley Supply 16/1/40.	Meden Valley Supply 16/1/40.
Suspended Matter	none	none
Appearance of a column 2ft. long	clear; colourless	clear; colourless
Taste	normal	normal
Odour	none	none
Chemical Examination.	Parts per 100,000	
Total Solids dried at 180°C.	20.0	23.0
Chlorides in terms of Chlorine	1.90	3.40
Equivalent to Sodium Chloride	3.13	5.60
Nitrites	none	none
Nitrates as Nitrogen	0.24	0.24
Poisonous Metals (Lead, etc.)	none	none
Total Hardness	12.0	14.8
Temporary Hardness	7.0	8.5
Permanent Hardness	5.0	6.3
Oxygen Absorbed in 4 hours at 80°F.	0.017	0.021
Ammoniacal Nitrogen	0.0002	0.0002
Albuminoid Nitrogen	0.0010	0.0008
pH Value	7.8	7.6
Bacteriological Examination.		
B. Coli Test. (MacConkey's Bile Salt Lactose Broth)		
Probable number of coliform organisms per 100 ml.	0	0

Remarks. Satisfactory both Chemically and Bacteriologically.

	Rushley Supply (Chlorinated) July 2nd, 1941.	Meden Valley Supply (Chlorinated) July 2nd, 1941.
Physical Characters.		
Suspended Matter	none	none
Appearance of a column 2ft. long	clear; colourless	clear; colourless
Taste	normal	normal
Odour	none	none
Chemical Examination.	Parts per 100,000.	
Total Solids dried at 180°C.	17.0	25.0
Chlorides in terms of Chlorine	2.00	3.80
Equivalent to Sodium Chloride	3.30	6.26
Nitrites	none	none
Nitrates as Nitrogen	0.36	0.32
Poisonous Metals (Lead, etc.)	none	none
Total Hardness	11.0	13.6
Temporary Hardness	6.6	9.1
Permanent Hardness	4.4	4.5
Oxygen Absorbed in 4 hours at 80°F.	0.005	0.011
Ammoniacal Nitrogen	nil	nil
Albuminoid Nitrogen	0.0006	0.0010
Free Chlorine	none	none
pH Value	7.6	7.8
Bacteriological Examination.		
B. Coli Test. (MacConkey's Bile Salt Lactose Broth)		
Probable number of coliform organisms per 100 ml.	0	0

Remarks. Satisfactory both Chemically and Bacteriologically.

(Signed) John Evans.

Closet Accommodation.

	1940.	1941.
Number of visits re Conversions	119	69
Conversions completed during year	75	25
P.C.'s abolished, 1930-40-41	505	627
P.C.'s remaining	2802	2680

Public Cleansing.

There has been no change in the methods of collecting or disposal of refuse, other than the inauguration of a Collection of Salvage.

Inspections in connection with:

		1940.	1941.
1.	Housing Defects	313	272
2.	Factories and Workshops	34	18
3.	Infectious Disease	733	210
4.	Rat Infestations	48	43
5.	Shops Act	17	12
6.	Meat and Food Inspections:		
	(a) Slaughterhouses	126	200
	(b) Markets and Shops	108	114
7.	Dairies and Cowsheds	171	243
8.	Overcrowding	19	13
9.	Scavenging	185	271
10.	Disinfestation	37	23
11.	Temporary Dwellings	71	43
12.	Water Supply and Sampling	77	29
13.	Drainage	315	281
14.	Smoke Nuisances	16	5
15.	Miscellaneous Complaints and General Inspection	261	351
16.	Revisits	172	147
17.	Miscellaneous Housing Act Visits	463	363
	(a) Revisits for Housing Defects	343	229
	(b) Visits in connection with Re-Housing	80	58
	(c) Others for Clearance Area procedure	40	76
18.	Salvage	—	335
19.	Mortuary	—	59

Notices Served:

Informal Notices	74	77
Statutory Notices	3	5
Interviews	158	185
Informal Notices outstanding 31st Dec., 1939-40	35	62
Informal Notices outstanding 31st Dec., 1940-41	62	41

Summary of Work Done:

(a) Housing (No. of houses affected).

	1940.	1941.
Roofs, fallpipes, eaves, gutters, and walls repaired	97	118
Dangerous structures remedied	10	16
Remedy of dampness by cement rendering or insertion of Damp Proof Course	57	37
Yards Paved	64	23
Internal Repairs	99	101
Sinks provided	13	Nil
Sinks Renewed	26	17
Washing Coppers provided	5	Nil
Food Stores provided	0	4
Inside Water Supply provided	4	4

(b) General Work.

Water Closets and Structures Repaired	60	34
Ashpits Abolished	48	34
New Ashbins Provided	105	112
Accumulations Removed	33	12
Rat Infestations Abated	20	19
Complaints Unfounded	7	17
Reports to Surveyor	46	20
Complaints Received	200	153
Miscellaneous	48	25
Dirty Premises Cleansed	—	6
Animal Nuisance Abated	—	5

(c) Drainage.

No. of Premises Visited	320	241
Blocked Drains Cleansed	105	79
New Drains Tested and Passed	80	39
Defective Drains Found	49	31
Defective Drains Repaired	50	31
Open Channel Drainage Abolished	16	10
Cesspools Abolished	—	2

Smoke Abatement.

Two Mechanical Stokers were installed and one chimney improved.

Eradication of Bed Bugs.

	1940.	1941.
1. (a) Council Houses found Infested	0	3
Council Houses Disinfested	0	3
(b) Private Houses found Infested	5	2
Private Houses Disinfested	5	2

Schools.

The Sanitary Provisions at the Schools are reasonable. Teversal School is only provided with pail closets.

SECTION D.

HOUSING.

1.—Inspection of Dwelling-Houses During the Year:—

	1940.	1941.
(1) (a) Total number of Dwelling-Houses inspected for housing defects (under Public Health or Housing Acts)	257	206
(b) Number of inspections made for the purpose ...	272	206
(2) (a) Number of Dwelling-Houses (included under sub-head (1) above) which were inspected and recorded under the Housing Consolidated Regulations, 1925	0	1
(b) Number of inspections made for the purpose ...	0	1
(3) Number of Dwelling-Houses found to be in a state so dangerous or injurious to health as to be unfit for human habitation	30	2
(4) Number of Dwelling-Houses (exclusive of those referred to under the preceding sub-head) found not to be in all respects reasonably fit for human habitation	222	199

2. Remedy of Defects During the Year Without Service of Formal Notices:—

	1940	1941
Number of Defective Dwelling-Houses rendered fit in consequence of informal action by the Local Authority or their Officers	159	164

3. Action Under Statutory Powers During the Year:—

(a) Notices under Housing Acts	21	4
(b) Notices under Public Health Act	0	3
(c) (1) Number of dwelling-houses in respect of which notices were served	0	0
(d) Nil.		
Number of dwelling-houses in respect of which undertakings were accepted	0	0

4 Housing Act, 1935—Overcrowding.

No material Change.

5. Clearance Area Procedure.

Re-Housing.

No. of Families Re-housed	233	5
No. of Persons Re-housed	759	17
Houses demolished	113	147
Houses demolished since Slum Clearance commenced ..	604	751

New Houses Erected During 1940 and 1941.

(a)	By the Local Authority	Nil
(b)	By Private Enterprise	Nil

Public Health Act, 1936.

Camping Sites, Temporary Dwellings, etc.

It is essential that immediate and comprehensive action should be taken when circumstances permit.

Factories.

Routine inspections were made.

SECTION E.

INSPECTION AND SUPERVISION OF FOOD.

(a) Milk Supply:—	1940.	1941.
No. of Producers	76	76
No. of Retailers	127	127
Dealers' Licence to sell Pasteurised Milk	6	6
Supplementary Licences to sell Pasteurised Milk ...	2	2
No. of Visits to Cowsheds and Dairies	187	252
New Dairies erected	0	0
Cowsheds and Dairies Modernised	7	3
Minor Repairs at Cowsheds	3	3

(b) Meat and Other Foods

	1940-41.
No. of Slaughterhouses	30
Registered	6
Permanent Licences	10
No. of Butchers using the above	44
Annual Licences	14
Renewals of Slaughtermen's Licences	75
No. of Visits to Slaughterhouses	112

Particulars of Carcases Inspected and Condemned at Slaughterhouses.

1940 (part).	Cattle excluding Cows	Cows	Calves	Sheep and Lambs	Pigs
Number Killed	83	33	2	200	290
Number Inspected	83	33	2	124	290
All diseases except Tuberculosis.					
Whole carcases condemned ..	0	0	0	0	0
Carcases of which some part or organ was condemned ...	3	2	0	2	2
Percentage of the number inspected affected with disease other than Tuberculosis	3.6	6	0	1.6	0.68
Tuberculosis only.					
Whole carcases condemned ..	0	0	0	0	0
Carcases of which some part or organ was condemned ...	0	5	0	0	25
Percentage of the number inspected affected with Tuberculosis ...	0	15	0	0	8.6

Weight of meat condemned as a result of the above-mentioned inspections and

(1) due to Tuberculosis	210 lbs.
(2) due to other Diseases or Conditions ..	82 lbs.

Meat and Food Inspected and Condemned.

At Butcher's Shops and Depot.

1940.

33 lbs. Forequarter of Beef (T.B.)
65 lbs. Round of Beef (Bruising).
112 lbs. Liver, Beasts.
66 lbs. Skirts and Sweetbreads. (Putrefaction.)
56 lbs. Hearts.
2 Tails.
5 Beasts' Heads and Tongues.
13 Sheeps' Heads and Plucks.
9 lbs. Leg of Mutton.
4 cwts. 4 qrs. 9 lbs.

1941.

1 Carcase of Lamb, 30 lbs. (Mould).
1 Carcase of Lamb, 21 lbs.
1 Carcase of Lamb, 27 lbs. (Putrefaction and Mould.)
1 Carcase of Mutton (40 lbs. (Emaciated and Dropsy.)
1 Hindquarter of Beef (Putrefaction).
5 lbs. Hindquarter of Beef (plus 45 bs. Manufacturer) Bruising.
55 lbs. Argentine Beef (Bone Taint).
37 lbs. Hindquarter of Beef (plus 37 lbs. Manufacturer) Bruising.
15 lbs. of Beef (Bruising).

Other Food.

5 stone of Apples
2½ stone of Fish.
5 cases of Oranges.
1½ cwts. Tomatoes..
49 lbs. Bacon.

65½ doz. Eggs.
12 lbs. Meat Pies.
4 stone Fish Roe.
11 lbs. jam.
5 stone of Apples.
2½ lbs. butter.
3¾ lbs. Bacon.

Tinned Food.

217 bs. Tinned Meat.
7 Medium Tins of Milk.
3 Small Tins of Milk.
15 Large Tins Miscellaneous Food.
11 Small Tins Miscellaneous Food.

Inspection of Animals privately slaughtered.

1940—51 pigs. 1941—199 pigs, 1 calf.

Tuberculosis Order, 1925:—

Number of Cattle Slaughtered	1940	22
	1941	8

Food and Drugs.

The usual reports from the County Council have been received, but do not call for any special comment.

SECTION F.

PREVALENCE OF, AND CONTROL OVER, INFECTIOUS AND OTHER DISEASES.

South Nottinghamshire Joint Hospital Board.

The Board still appears to be impotent. The least it could do would be to assume responsibility for finding beds for cases of Infectious Diseases in available Hospitals, until it is able to acquire its own.

It was learned very unofficially, in September 1941, that a temporary Hospital was likely to be opened at Debdale Hall. The Medical Officers of Health of the constituent Districts should be kept directly and closely informed on the work of the Board.

This Council paid the following precepts to the Board:—

Financial year 1/4/40 to 31/3/41 ..	£65 16s. 2d.
Financial year 1/4/41 to 31/3/42 ..	£757 15s. 4d.

Scarlet Fever, 1940.

Scarlet Fever was prevalent throughout the year, 114 cases being notified, 40 of which were admitted to Hospital. The maximum incidence was in the winter months.

Diphtheria 1940.

1. All Wards.

97 cases were notified, and there were four deaths. The increased incidence was due to the sharp epidemic in the New Street Schools (Huthwaite Ward), and to the cases in Harlow Wood Orthopædic Hospital (East Ward).

In the other Wards the incidence was rather less than usual. See graphs.

The above epidemics accounted for 69 cases. Five of the remaining cases had a common source. (Section IV).

90 cases were treated in Hospital. 1,046 swabs were examined at a cost of £157 6s. 0d., and in addition a large number of swabs were dealt with by the Nottingham City Laboratory, free of charge, under the County Council Scheme. The supply of Anti-Toxin cost £50 3s. 10d.

11. Huthwaite Ward.

(a) History 1875-1938.

From 1875 to 1934 Huthwaite was singularly free from diphtheria. With the exception of 1917 (21 cases) and 1918 (19 cases) the notifications did not exceed 8 in any one year. In 1935 the Urban District was amalgamated with

Sutton-in-Ashfield and became the Huthwaite Ward of the latter district. From that time to the end of 1938 no case of diphtheria was notified in the Huthwaite Ward.

(b) 1939.

Four cases were notified. Two in March and one in December, had no known contacts in New Street Schools. The other, notified in August, was in Class 3A of the Junior School. This boy had a severe faucial diphtheria, and, after clinical recovery, his swabs remained so persistently positive that he was not discharged from hospital until November 6th, following three consecutive negative results. He returned to School on December 3rd and had no further absences from then to the end of the Easter Term. He was examined at school on March 18th, 1940, and showed no clinical or bacteriological evidence of infectivity, though, on his return to school after the Easter holiday, a positive swab was reported. Again there were no clinical signs and four further consecutive swabs were negative.

(c) 1940.

(i) Total Cases.—Fifty-one cases were notified. Two in February attended New Street Junior School. One on the 19th from Class 4B had no family contacts in the school. The other, on the 21st, was in Class 3B and had a brother in the same class and another in Class III of the Infant School.

These contacts were excluded from school. Their throat swabs were negative and in the absence of clinical signs they returned to school on March 11th. The Junior contact, who was said to have had an intermittent aural discharge since infancy, was found to have a positive ear swab on March 29th. (see School Plan).

Of the remaining 49 cases notified during the year, 45 occurred in the New Street Schools epidemic of March and April.

(ii) New Street Schools Epidemic in March and April.—On Saturday, March 16th, two cases were notified. In one, from Class 3 of the Infant School, notified, as laryngeal diphtheria, the diagnosis was not confirmed bacteriologically. The child died on the way to hospital and the cause of death was certified to be diphtheria. The other case was from Class 3A Junior School.

Two more cases were notified next day, Sunday 17th, and again, one was from Class 3 Infants' and the other from Class 3A Junior School. The latter had been off school with " swollen glands of the neck " from the 4th to the 12th March and had returned to school on the 13th without having medical advice.

All four cases had last attended school on Friday, March 15th.

On the morning of Monday 18th, New Street Schools were visited. It was decided, in the first instance, to concentrate attention on all the staff and on the children in Class 3 Infants' and Classes 3A and 4A Junior, and all absentees from these classes.

No cases or positive swabs were found in the Infant School. In the Junior School one advanced clinical case was discovered in Class 3A, and two positive swabs were reported. Neither of the latter developed clinical diphtheria. In Class 4A a possible early case was found.

The clinical case had a firm membrane covering both tonsils. She said she had not felt very well a week earlier, but had not been absent from school. She denied having a sore throat and said she was now better. She had not been seen by a doctor.

The possible early case was a boy whose enlarged tonsils were in an early stage of acute inflammation, though there was no obvious exudate. The swab was reported negative. He was excluded from school, and, when examined two days later, showed clinical and bacteriological evidence of faucial diphtheria. A sister aged three years was also found to have clinical diphtheria, at about the same stage of development.

Examination of school absentees yielded two more cases, one from Class 3 Infants' and the other from Class 3A Junior.

In addition, eight further cases, seven from the Junior School and one from the Infants' School, were notified by a medical practitioner.

Of the eleven cases notified on March 18th, ten had attended school on the 15th and the other was last at school on the 14th.

From the 19th to the 31st March, 22 more cases were notified, only one of which attended the Infant School.

During April, eight cases were notified only one of which attended the Junior School.

The final cases were notified on April 30th.

The age and sex incidence, and deaths, in the New Street Epidemic are shown in the following table:—

	Cases.			Deaths..		
Age	M.	F.	Total.	M.	F.	Total.
0—5 years	3	2	5	—	1	1
5 years	5	1	6	1	—	1
6 years	—	—	—	—	—	—
7 years	2	1	3	—	—	—
8 years	1	1	2	—	—	—
9 years	12	5	17	—	—	—
10 years	2	7	9	—	—	—
11 years	2	—	2	—	—	—
Adults	—	1	1	—	—	—
Totals	27	18	45	1	1	2

The disease was of moderate severity and the cases typed proved to be of the intermediate strain.

At the time of the epidemic, the school population of Huthwaite Ward was about 700 of whom 687 attended schools in the Sutton-in-Ashfield Urban District.

Infants.—Common Road School, 103 (Church of England).
New Street School, 148 (Notts. County Council).

Juniors.—New Street School, 207 (Notts. County Council).

Seniors.—Huthwaite Road School, 229 (Notts. County Council).
(This school is in the West Ward. About 50% of the pupils are from Huthwaite).

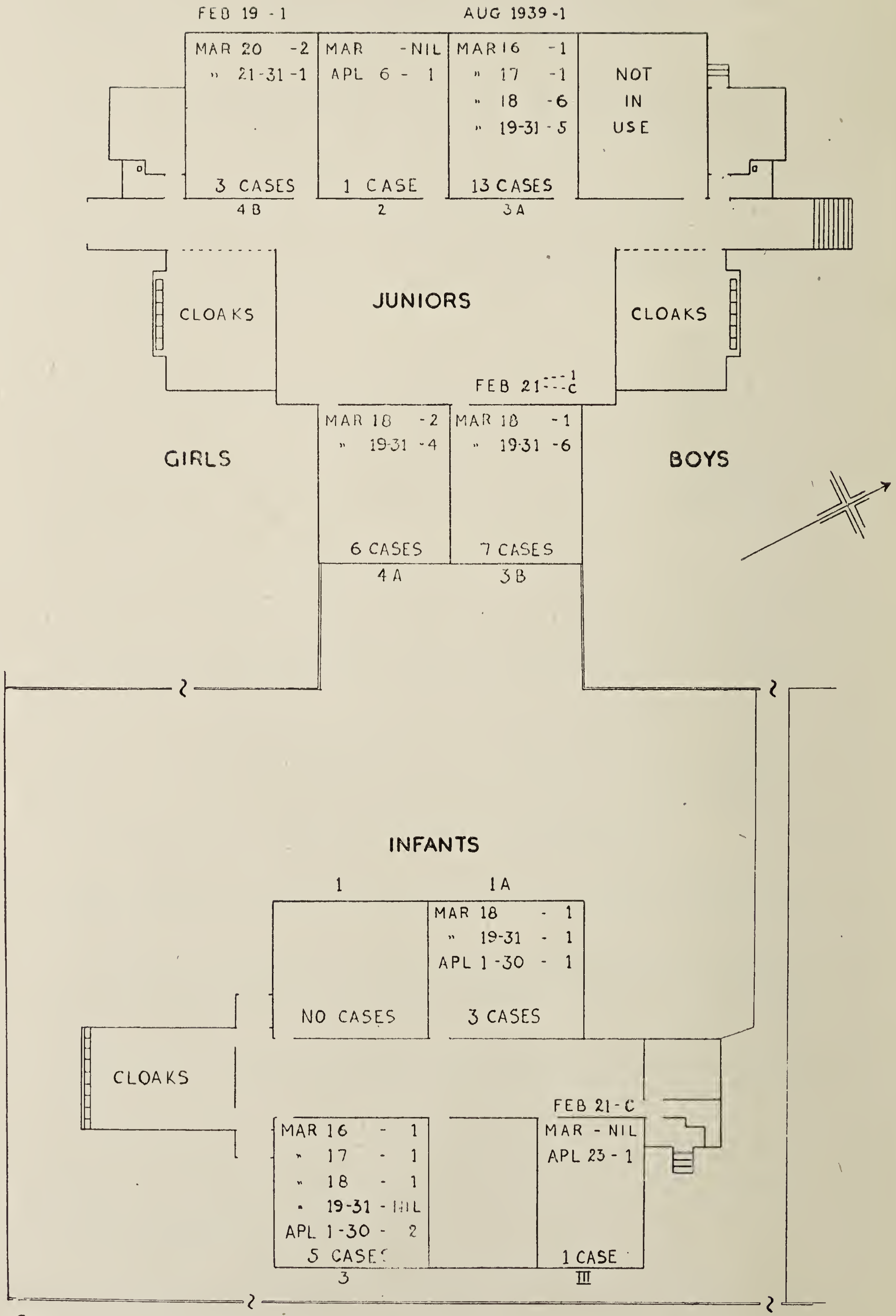
New Street Infant and Junior Schools are closely adjacent as shown in the plan. There is considerable home and social contact between children attending all the above schools.

In New Street Schools the children sit at double desks, except in Classes 3 and III Infants', where chairs and tables are used. In the Infants' School separate boxes or lockers are provided, but only Class 2 in the Junior School has this provision.

With the exception of Class 3A Junior, cases were distributed fairly uniformly throughout each affected Class. In 3A there was a group of cases at adjacent desks as shown below:—

X X	X B	X pupils not infected. O empty seat.
X C	X A	A notified 16th—last at school 15th. B notified 17th—off school 4th-12th with "swollen glands of neck," attended school 13th, 14th and 15th.
X O	X D	C clinical case found at school 18th. D notified 18th—last at school 15th.

NEW STREET SCHOOLS



SCALE 20·83 ft to 1 INCH

C = FAMILY CONTACT OF CASE

The proportion of children affected in each class, and the sex incidence, are shown below:—

	BOYS		GIRLS		TOTAL	
	On Register	Cases	On Register	Cases	On Register	Cases
JUNIOR IVA ..	21	3	24	3	45	6
SCHOOL IVB ..	13	2	30	1	43	3
IIIA ..	21	8	22	5	43	13
IIIB ..	22	3	15	4	37	7
II ..	23	1	16	0	39	1
Juniors—Total	100	17	107	13	207	30
Infants—Total	80	7	68	2	148	9
INFANTS 3 ..	13	5	15	0	28	5
SCHOOL III ..	22	0	14	1	36	1
I ..	18	0	19	0	37	0
IA ..	27	2	20	1	47	3

Pasteurised milk is delivered to each school daily. The same bulk supply is distributed to the schools, a large factory and many homes in the Huthwaite Ward, as well as to the other Wards in the District. About 75% of the children have this milk in school and some of the Infants have Horlick's milk. The children either drink through a straw or direct from the bottle, the former method predominating.

PREVENTIVE MEASURES.

The Regional Medical Officer was notified of the outbreak. He visited the schools on Tuesday, March 19th, and expressed full agreement with the preventive measures instituted on the 18th.

The County Medical Officer was informed of the epidemic and immediately put officers of the School Medical Service at my disposal when required. A school nurse reported for duty on the 19th, and with her assistance efficient supervision of the children was maintained until such measures were no longer essential.

General Practitioners were notified of the occurrence of cases of diphtheria in the Huthwaite Ward and particularly amongst New Street pupils. They were also reminded of the importance of the early administration of serum and of the possibility of some delay in securing admission of cases to hospital.

The Health Department was kept open at week-ends to receive and transmit swabs to Mansfield for examination and to secure hospital accommodation for cases with minimum delay.

The work of the 18th has already been described. The examinations, visits and investigations were carried out with the assistance of the Health Visitors and Sanitary Inspectors.

The Medical Officer of Health in a talk to the Head Teachers outlined the common modes of spread of the disease and stressed the importance of adequate spacing, ventilation and the potential dangers of communal pens, pencils, etc. More hygienic methods of storing and issuing drinking straws, and for the distribution of gummed paper for model making, were suggested. Children with apparent malaise or possible catarrhal symtoms were to be referred to the School Nurse.

The Inspectors made detailed enquiries on the milk supply and distribution to and in the schools, the time-tables of the classes, degree of intermingling in school, etc., in addition to the usual routine work of reporting on each case, arranging disinfections, etc.

From the 19th onwards the School Nurse visited the schools each morning and inspected any children reported to have catarrhal or possible throat symtoms. She was supplied with a daily absentee list and home visiting was maintained for the remainder of the term, which ended on the 22nd March. She impressed on parents the importance of early medical advice in all cases of illness and where any catarrhal symptoms were present she revisited to see that her instruction had been carried out. Cases with throat symptoms were immediately and directly reported to the Medical Officer of Health, who visited and examined them.

During the school holidays the premises were well cleaned and ventilated. Communal pens and pencils were destroyed and books spread out and aired.

The following recommendations were made to the County Medical Officer who agreed.

Provision of individual pen, pencil and books with a box for each child.

Provision of a container for milk straws for each class and children to be instructed how to take one with the minimum risk of handling others.

Improved drinking water facilities.

After the Easter holiday, the schools re-opened on April 1st. With the assistance of the School Medical Officer, all children were inspected before admission to a class room. Some were swabbed and excluded. No clinical cases were found. As before the vacation, absentees were visited by the nurse. No child was allowed to return to school without examination by and permission of the Medical Officer of Health. This restriction was kept in force until the epidemic had completely subsided.

HOSPITAL ACCOMMODATION

The only source of serious anxiety was the absence of definite facilities for the removal, isolation and treatment of infectious disease. Though this Authority has agreements with other districts they do not provide for specific beds, nor is an infectious diseases ambulance maintained by the Sutton-in-Ashfield Urban District Council. The Council is therefore indebted to those Authorities by whose courtesy 45 cases were conveyed and admitted to hospital for treatment. Their assistance alone, enabled me to avoid the hasty improvisation of a temporary hospital in one of our clinics or other available premises. The serious objections to this measure were fully appreciated, but the improbability of securing sufficient hospital accommodation compelled the anticipation of this action in emergency, and provisional preparations were made. Housing conditions made domiciliary treatment impracticable.

Cases were accepted as follows:—

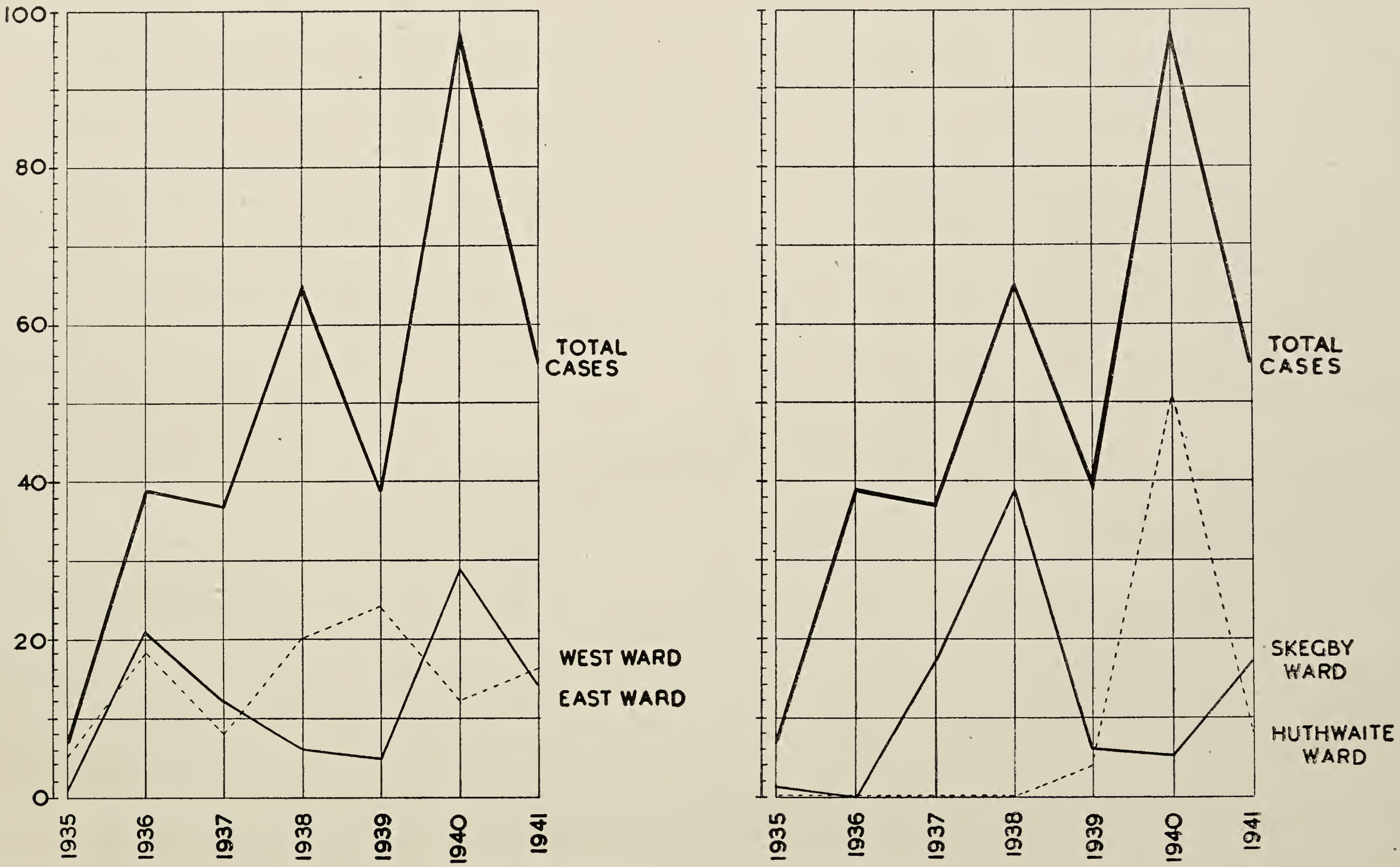
Basford Rural District Council	13
Mansfield Borough	8
City of Sheffield	8
North Derbyshire Hospital Committee	7
Derby Borough	4
North Notts. Joint Hospital Board	4
Long Eaton and Shardlow Urban Districts	1

Transport to Sheffield and Derby was provided by:—

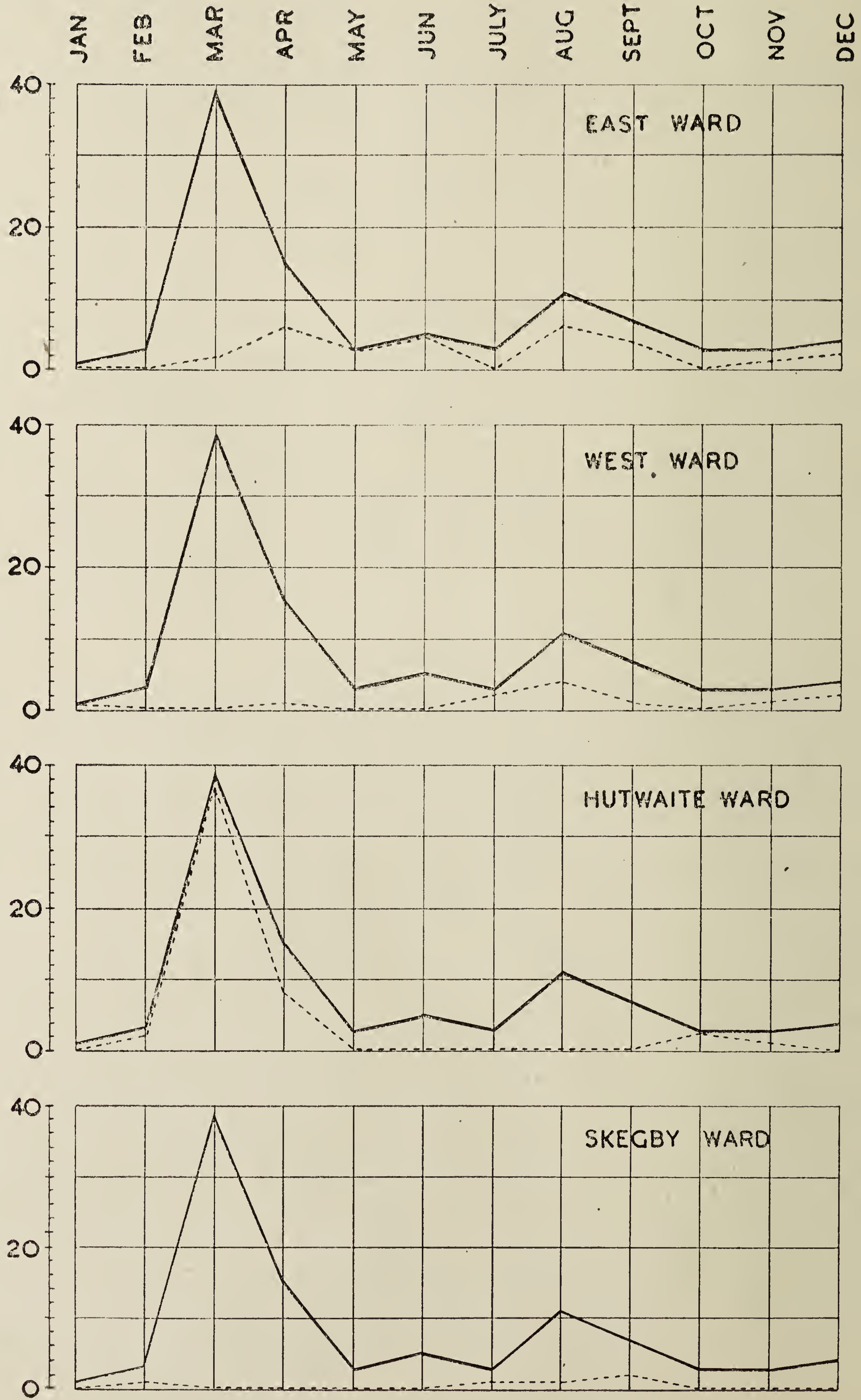
Basford Rural District Council.
Kirkby-in-Ashfield Urban District Council.
Hucknall Urban District Council.

In addition, Leicester City agreed provisionally to accept cases.

DIPHTHERIA PREVALENCE 1935 - 1941

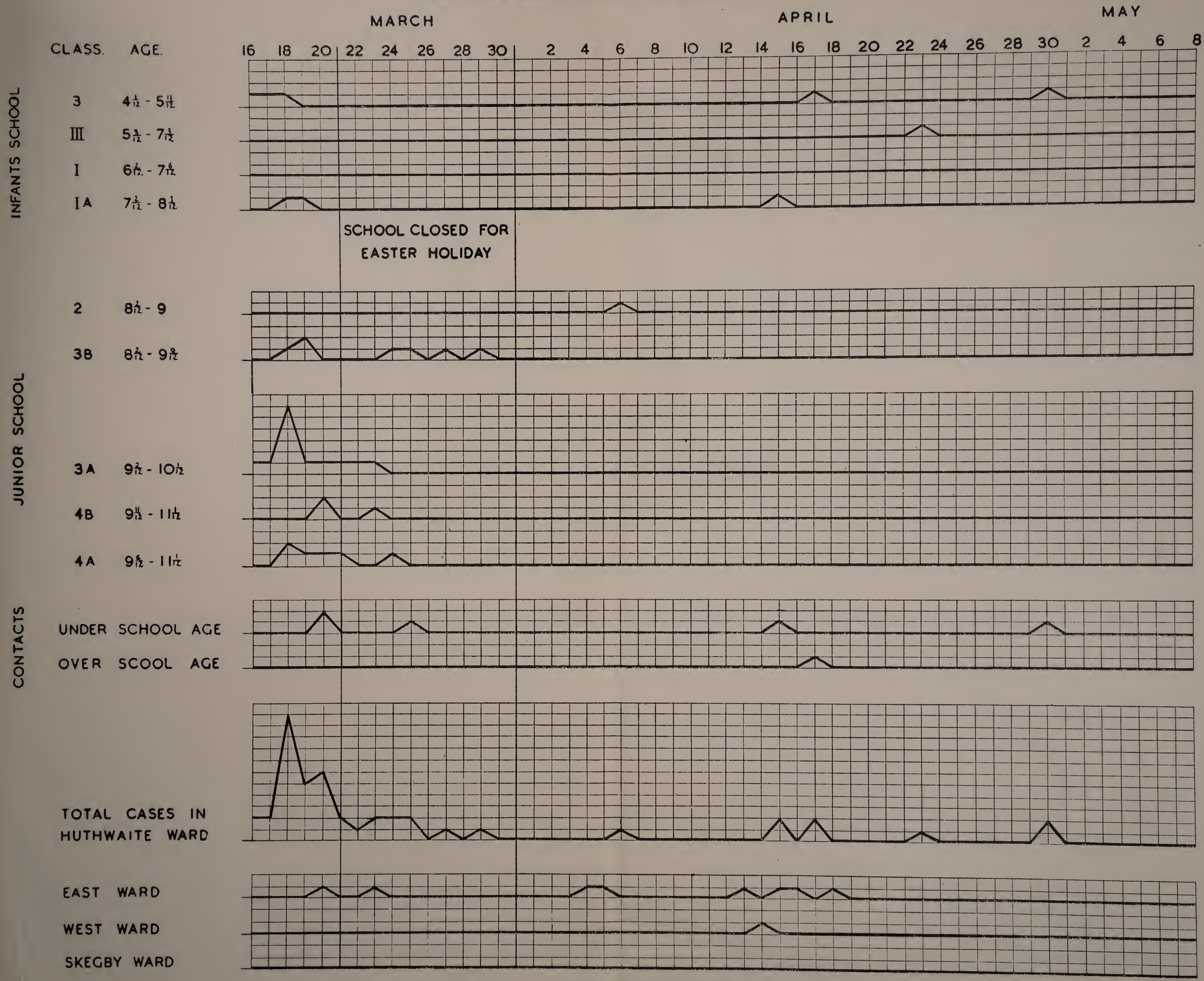


DIPHTHERIA INCIDENCE 1940



Total Cases—continuous line: Ward Cases—broken line.

DIPHTHERIA 1940 GRAPH



Scale one square = one case.

SUMMARY.

At a time when mass immunity was likely to be low and catarrhal infections were prevalent, diphtheria was brought into the Junior School. The precise mode of spread to the Infant School was not demonstrated. There was no evidence that contacts of the case of February 21st were infective when they returned to both schools on March 11th, or were in contact with the first epidemic cases. It will have been noted that of the two cases on the 16th and on the 17th one was an infant and one a junior.

Though contact between Infants and Juniors is probable in the playgrounds, and children of both age groups from the same family attend these schools, the most careful enquiries failed to reveal positive evidence of direct or indirect contact between the first two Infants and first two Juniors, or of their contact with a common source of infection. Three of the later Infant cases had family contacts with the Junior School.

The only school children affected were pupils of New Street Schools, though some of the home contacts attended other Infant and Senior Schools.

The epidemic proper was mainly confined to the Junior School and the later cases to the Infants' School.

14% of the Juniors and 6% of the Infants were affected, and both the absolute and relative incidence was greater in boys.

In addition to 39 school children, six home contacts developed the disease, five under school age and one adult.

One Infant pupil and one child under school age died.

None of the cases had been immunised.

NOTES AND COMMENTS.

The insidious onset of diphtheria was demonstrated by the clinical case found in Class 3A. Her symptoms had been so unobtrusive that no suspicions of her illness were aroused at home.

The child who returned to Class 3A on the 13th still suffering from a throat infection, is said to have been sent back to school as a result of a visit from the School Attendance Officer. Before requiring such cases to return to school it would be wise to refer them to the school clinic for examination.

One school absentee from Class IIIB, visited on March 20th, was found to have otorrhœa, said to be of about three days' duration. There were no clinical signs in the throat, from which the swab was negative. The aural swab was positive, and the only other child in the house, aged 4 years, was found to have clinical diphtheria. There was no evidence that this child had been in contact with any other potential source of infection.

The prompt action of the Chief Sanitary Inspector in at once reporting to me the first cases of Saturday, March 16th, and again on Sunday, 17th, secured the earliest possible introduction of preventive measures which, I am satisfied, materially limited the spread of infection.

By keeping the Schools open, cases of sickness amongst New Street pupils were automatically recorded, and the nature of the illness could be determined without delay. In addition, those attending school were kept under supervision. Thus, potential sources of infection were under control. Had undue attention been paid to a section of public opinion which strongly advocated school closure, the epidemic would have reached much greater dimensions owing to undetected illness and the unrestricted intermingling of sick, infective and healthy children.

On the whole, school attendance was well maintained, though some parents were afraid to send their children to school lest they might contract diphtheria. It is to be noted that these same parents had taken no steps to have their children medically examined.

Some parents appeared to be reluctant to seek medical advice for sick children until the appearance of obvious signs of distress, and some were so upset at the thought of their child being removed to hospital that they refrained from calling the doctor in case he might advise this course.

Only Local Authorities who provide the necessary means of transport, isolation and treatment of Infectious Disease should be responsible for the control of epidemics, and, when adequate provision has been made by each Authority, complete mutual assistance should be compulsory.

The South Notts. Joint Hospital Board, though having no hospital of its own, should nevertheless be responsible for the provision of adequate facilities when required by any of the constituent districts.

I greatly regret that no scheme for free immunisation against diphtheria had been undertaken before this epidemic.

Costs.

Hospital Charges	1,088
Examination of Swabs	66
Conveyance	44
	£1,198

I would like to record my appreciation of the active interest shown by the Regional Medical Officer, and to acknowledge the co-operation of the County Medical Officer of Health and his School Medical Officer. The County Nurse allocated for duty under my direction deserves mention for her ready acceptance of my instructions and their efficient execution. My sincere thanks are due to the Medical Officers of Health who loaned transport and admitted cases for treatment, to the Mansfield Public Health Laboratory, where, at the shortest notice, arrangements were made for the examination of a large number of swabs, and to the Nottingham City Laboratory, where by arrangement with the County Medical Officer of Health, a number of later swabs were examined and organisms typed. All the staff of my own department worked with enthusiasm and efficiency. I am indebted to Mr. S. F. Bayley for the preparation of the Graphs.

III. East Ward.

Of the 29 cases notified during 1940, 18 occurred in Harlow Wood Orthopædic Hospital between March 20th and September 23rd. They were confined to the Children's Ward, where 15 patients, 2 nurses and 1 maid contracted the disease. None of the cases had been immunised. There were no deaths.

Non-clinical positive throat swabs were reported in six children and one nurse. Positive nasal swabs were found in four instances and one child with Otorrhœa had a positive ear swab.

It is worthy of note that one child, removed to an Isolation Hospital because of a positive nasal swab on May 19th, still had a positive swab on October 10th. The child was re-admitted from the Isolation Hospital direct to Harlow Wood on June 3rd.

The precise origin of the epidemic could not be determined with any certainty. The possible introduction of infection from Huthwaite Ward was carefully investigated. No positive evidence of any relationship between the two outbreaks was found, though a maid, employed and domiciled in the Hospital, came from the Huthwaite Ward. Her brother attended New Street Infant Schools (Class 1A) and a sister of one of her friends gave a positive swab on March 18th. Neither the maid nor her brother showed clinical signs of diphtheria or bacteriological evidence of infectivity. Though potentially in contact with infection in Huthwaite Ward on March 17th, the maid was not in Ward 3 on material duties thereafter, nor was she known to have been in contact with the staff of the Ward.

Analysis of recent admissions to the Hospital also failed to give any clue to the source of infection. The child with Otorrhœa had been in the Ward for two months, and, though the swab was positive after notification of the first case of diphtheria, it was not known when the ear became potentially infective. The first cases notified had been in Hospital for some months.

The Hospital Committee were naturally concerned at the recurrence of cases and on October 5th, 1940, they asked for assurance that the infection had no relation to drainage defects. The following report was therefore submitted to the Secretary:

14th October, 1940.

Diphtheria in Ward 3, Harlow Wood Hospital, 1940.

History.

The first case of the series was notified on 20th March and the next on the 23rd March. On this date also, three children were found to be potential carriers.

The Medical Officer of Health visited the Hospital and held a general inquiry and indicated to the resident Medical and Nursing Staff the main points requiring attention to prevent further spread.

Thereafter on the 29th a fourth child was found to have a positive aural swab.

Two of the potential carriers were admitted in January, 1940, though, of course, it is quite impossible to say when they became infective. The others had been in the Hospital for a long time.

Up to April 18th, five other cases were notified, one a maid, two nurses, and two patients.

It is possible that the epidemic would then have been terminated but for the re-admission on May 7th of a case sent to an Isolation Hospital as recently as April 15th. To make matters worse this case was admitted direct from the Isolation Hospital. Thereupon three more cases occurred and other two positive swabs were found.

At the beginning of June two more positive swabs were found, one from a nurse who had recently returned to work after being away with a sore throat. Five clinical cases were notified during this month. During the same period five patients were re-admitted, four direct from Isolation Hospitals and one after only one week at home. In addition, one of the notified cases, having no clinical signs but being Schick positive, was retained in Harlow Wood.

There were no cases in July, but three patients were re-admitted after eigth weeks at home following their discharge from Isolation Hospitals. One of the Nurses returned and was on Ward 3 for one day.

One case occurred in August and a further case was re-admitted direct from the Isolation Hospital.

In September, there were two clinical cases, and two positive swabs were found, one in the case re-admitted direct from Isolation Hospital on August 15th.

Another positive swab was obtained in October from the patient found positive on May 19th, and subsequently re-admitted direct from Isolation on June 3rd.

Commentary.

It will be obvious that while it is impossible to define the exact origin of the first case there is no mystery about the secondary cases. Nor is it necessary to invoke the mythical dangers of the drainage system to find the explanation. On the contrary, those cases are the natural sequel to an attempt to combine an Isolation, and an Orthopædic Hospital without the essential facilities or staff.

It must be remembered that a Children's Ward is particularly liable to have infection introduced at any time and the results will depend on the number of susceptibles in the Ward and the opportunities offered for the spreading of infection. Diptheria is spread by infected secretion from the throat, nose, or occasionally the ear, and may be carried by persons with no evidence of clinical disease.

The greatest obstacle to the termination of the epidemic is the lack of a suitable isolation and observation ward on the cubicle principle. Without this it was impossible to isolate completely from the other children those who were potential sources of infection. I understand that the cubicle system is not possible in the general ward.

There were innumerable possible factors favouring the communal spread of infection owing to the general lack of restriction on the liberty of the children in the ward. It was noted that for those attending school individual pencils, etc., were not provided. The relative isolation possible for potential carriers was unsatisfactory.

To ensure the maximum safety, sheets, etc., from cases known to harbour the organism were disinfected regularly in addition to the normal terminal disinfection on discharge from Harlow Wood.

Immunisation.

I understand patients and staff of Ward 3 were Schick tested and immunised where necessary soon after the initial cases. It will be noted that after June 7th cases occurred only in children subsequently admitted to the Ward. It is important to understand that immunity takes some months to develop and that the reliability of the Schick Test result depends on the technique adopted.

For the present it would be advisable to admit only immunised children, though it is impossible, at present, to adhere to the rule strictly owing to the many administrative problems outside Hospital control.

It must be realised that immune children may carry the organism so that immunisation does not eradicate potential sources of infection. New admissions, known to be susceptible, should therefore be placed in one of the side Wards.

Whilst the difficulties of nursing orthopædic cases at home is appreciated, their re-admission direct from Isolation Hospital, particularly in the absence of a proper observation and isolation ward for their reception, is inviting infection of susceptible children. Apart from diphtheria, they may also be in the incubation stage of some other infectious disease. Negative swabs cannot be relied on absolutely as evidence of permanent freedom from b. diphtheriae.

Milk.—There was no evidence to incriminate the general Milk Supply. I understand that the milk now supplied is Tuberculin tested. Whatever other virtue this may have it is no protection against infections, and if such was desired a pasteurised supply was indicated, the milk being delivered in sealed containers and being distributed in the Ward with satisfactory precautions against contamination before consumption by the patients.

All cases of infectious disease notified are the subject of inquiry by this Department and, if necessary, of personal investigation by the Medical Officer of Health. The cases in this series are no exception, but it must not be anticipated that it is yet possible to alter at will the normal behaviour of micro-organisms. The factors favouring spread, however, can be controlled, if the facilities and staff are available, and if the required precautions are strictly observed. Advice on such matters is always available from the Public Health Department and was given on several occasions during the past six months.

The cost to the Sutton-in-Ashfield Urban District Council of the cases from March 20th to date is £296 16s. 0d.

T. S. McKean.

Once again this Authority was entirely dependent on their more provident neighbours who removed to Hospital and admitted 17 of the cases and 2 non-clinical cases with positive swabs. One clinical case was retained in Harlow Wood Hospital.

Cases were accepted as follows:—

Mansfield Borough	8
Basford Rural District	4
North Notts. Joint Hospital Board	3
Nottingham City	2
Sheffield City	1
North Derbyshire Hospital Committee	1

The special nursing required by orthopædic patients made transport and treatment more difficult than in uncomplicated cases, and so increased the difficulty of securing hospital accommodation.

It should be recorded that of the total cost, £396 15s. 6d. for treatment, and transport, £387 15s. 6d. was incurred for cases normally resident in other districts. This appears an excessive liability for the unfortunate Authority in whose District the Orthopædic Hospital is situated, especially as the latter is not under the administrative control of the Urban District Council. The cost of one case, normally resident in Sheffield, was borne by that Authority.

IV.

Another series of five cases (3 in the East and 2 in the West Ward) notified between December 12th and 31st, and aged from 6 to 18 years, appeared to have a common source. All were frequent visitors at a house where a case occurred on August 8th (discharged from Hospital 30th October), and another member of the family had had a sore throat earlier in the same month and a subsequent palatal paralysis in September. Though all the members of the family were swabbed no bacteriological evidence of infectivity could be demonstrated. Another contact of this family developed diphtheria in September, and her sister (who had had diphtheria in 1938) gave a positive swab from 13th to 29th September, and negative swabs thereafter. It appeared more probable that the latter had been re-infected from the potentially infective household directly, or via the sister, than that she was an intermittent carrier and the real source of the series. One case, a girl aged 7, died.

Diphtheria Prophylaxis, 1940.

Circular 2230 was received on the 10th December, 1940. With the consent of the Chairman of the Council, immediate steps were taken to ensure that the scheme would be in operation as early as possible in January, 1941.

The co-operation of the County Medical Officer of Health and Sutton School Managers and Head Teachers was secured. All General Practitioners were invited to assist and willingly agreed.

Through the Schools a letter was sent to the parents of school children, and a letter and consent card were sent to parents of children under 5 years of age. Local publicity was arranged, equipment purchased and a provisional programme of immunisation sessions drawn up.

In the first stage, school children were to be immunised at the schools and children under 5 years of age at the Clinics.

A full report of the action taken was submitted and confirmed by the Health Committee on December 30th, 1940.

The dosage recommended by the Ministry of Health was regarded with some misgiving. An increase was suggested, but on the further evidence of the Regional Medical Officer and in the absence of personal clinical experience, the official dosage was adopted.

Cerebro-Spinal Meningitis, 1940.

Ten cases were notified, one being a non-civilian. The nine civilian cases were removed to Lodge Moor Hospital and one child, age 11 months, died.

Five of the cases occurred in February, and during this month Sulphapyridine was made available to General Practitioners for the treatment of C.S.M.

Measles, 1940.

597 cases were notified, 423 occurring in the months of September, October and November. There were no deaths.

Whooping Cough, 1940.

105 cases were notified. The maximum incidence was from September to December, when 71 cases were notified.

Enteric, 1940.

Four cases were notified. The organism isolated was the b. paratyphosus B.

A full investigation of three of the cases failed to reveal any positive evidence of the source of infection or any relationship with each other. The fourth case was infected by another member of her family.

Two were children and two adults. All were treated in Lodge Moor Hospital and recovered.

Puerperal Pyrexia, 1940.

Seven cases were notified, one by Mansfield Hospital, one by Leigh Bank Nursing Home, and five by General Practitioners. Four of the latter were removed to Hospital. Though one case proved fatal, the cause of death was found to be a Pelvic abscess and intraperitoneal sloughing of a uterine fibroid. This case was therefore not a puerperal pyrexia.

One case was seen by a Consultant.

	Costs. £	s.	d.
Consultant Fee	1	1	0
Hospital Charges	25	7	3
Amount to be recovered under scale	23	1	0
Cost to Council	£3	7	3

Notifiable Diseases During:

	1940 Cases Notified	1940 Admitted to Hospital	1940 Deaths	1941. Cases Notified	1941. Admitted to Hospital	1941. Deaths
Smallpox	0	0	0	0	0	0
Scarlet Fever	114	40	0	54	16	0
Diphtheria	97	90	4	55	45	4
Enteric Fever	4	4	0	2	1	0
Cerebro-spinal Meningitis ..	10*	10*	1	4*	4*	0
Pneumonia	19	0	0	18	0	0
Erysipelas	11	0	0	10	0	0
Puerperal Pyrexia	7	4	1	4	3	0
Ophthalmia Neontorum ..	3	1	0	1	1	0
Measles	597	0	0	23	0	0
Whooping Cough	105	0	0	85	0	4
Acute Poliomyelitis ..	0	0	0	1	1	0

1940: *Includes One Non-Civilian

1941: *Includes Two Non-Civilian

Cases Notified in Wards.

	1940				1941			
	West	East	Huthwaite	Skegby	West	East	Huthwaite	Skegby
Scarlet Fever	40	39	12	23	19	13	12	10
Diphtheria	12	29	51	5	16	14	8	17
Enteric Fever	0	2	1	1	2	0	0	0
Cerebro-Spinal Meningitis	4*	4	0	2	2	2*	0	0
Pneumonia	1	6	7	5	5	7	2	4
Erysipelas	1	7	0	3	5	3	0	2
Ophthalmia Neontorum	3	0	0	0	0	1	0	0
Puerperal Pyrexia ..	3	3	0	1	1	2	0	1
Measles	211	244	107	35	13	5	0	5
Whooping Cough ..	30	29	10	36	24	46	3	12
Acute Poliomyelitis ..	0	0	0	0	1	0	0	0

*Includes One Non-Civilian

*Non-Civilians

Analysis of Notified Cases During the Year 1940 according to Age Groups.

Disease	Under 1 year	1	2	3	4	5	10	15	20	35	45	65 and over	Total
Scarlet Fever ..	0	3	7	5	3	36	26	20	12	1	1	0	114
Diphtheria ..	0	0	6	5	6	48	18	5	6	3	0	0	97
Enteric Fever (Including Paratyphoid) ..	0	0	0	0	0	1	1	0	2	0	0	0	4
Cerebro-Spinal Meningitis ..	1	1	0	0	0	2	0	4	2*	0	0	0	10
Pneumonia ..	0	0	0	2	1	2	2	1	3	3	5	0	19
Erysipelas ..	0	0	0	0	0	0	0	0	2	1	7	1	11
Puerperal Pyrexia	0	0	0	0	0	0	0	0	7	0	0	0	7
Measles ..	2	40	64	52	61	341	14	14	8	0	1	0	597
Whooping Cough	4	19	8	16	13	44	1	0	0	0	0	0	105

*One Non-Civilian.

Analysis of Notified Cases During the Year 1941 according to Age Groups.

Disease	Under 1 year	1	2	3	4	5	10	15	20	35	45	65 and over	Total
Scarlet Fever ..	0	2	3	4	4	26	10	3	1	1	0	0	54
Diphtheria ..	0	1	1	5	1	16	6	20	5	0	0	0	55
Enteric Fever (Including Paratyphoid)	0	0	0	0	0	0	0	0	2	0	0	0	2
Cerebro-Spinal Meningitis ..	0	0	0	0	0	1	0	0	3*	0	0	0	4
Pneumonia ..	0	0	2	0	0	3	1	1	2	4	4	1	18
Erysipelas ..	0	0	0	0	0	0	0	2	0	4	4	0	10
Puerperal Pyrexia	0	0	0	0	0	0	0	1	3	0	0	0	4
Measles ..	1	2	4	2	2	10	0	1	1	0	0	0	23
Whooping Cough	8	13	12	13	12	24	2	0	1	0	0	0	85
Acute Poliomyelitis	0	0	0	0	0	0	0	0	1	0	0	0	1

*Includes Two Non-Civilians.

COST OF INFECTIOUS DISEASES

1940.

	Total No. of Cases	Admitted to Hospital	Hospital Charges	Conveyance Charges	Paid to contacts to minimise danger of infection	Total	(Of these amounts the following were chargeable to the Evacuation Account). Hospital	Conveyance
			£ s. d.	£ s. d.	£ s. d.	£ s: d.	£ s. d.	£ s. d.
Scarlet Fever ..	114	40	795 13 0	49 8 5	2 15 0	847 16 5	68 14 0	5 5 0
Diphtheria ..	97	90	2060 12 0	106 0 6	3 1 0	2169 13 6	84 0 0	5 5 0
Cerebro-Spinal Meningitis ..	10	9	228 15 0	31 0 0	4 8 8	264 3 8	20 5 0	5 18 0
Enteric ..	4	4	112 10 0	18 15 0		131 5 0		
Totals, 1940 ..	225	143	3197 10 0	205 3 11	10 4 8	3412 18 7	172 19 0	16 8 0

1941.

	Total No. of Cases	Admitted to Hospital	Hospital Charges	Conveyance Charges	Paid to contacts to minimise danger of infection	Total	Hospital	Conveyance
			£ s. d.	£ s. d.	£ s. d.	£ s. d.	£ s. d.	£ s. d.
Scarlet Fever ..	54	16	319 7 0	20 16 6	4 0 8	344 4 2	26 2 0	1 15 0
Diphtheria ..	55	45	811 4 0	52 15 1	7 3 2	871 2 3		
Cerebro-Spinal Meningitis ..	4	2	39 15 0	9 7 6		49 2 6		
Enteric ..	2	1	30 3 0	7 0 0		37 3 0		
Totals, 1941 ..	115	64	1200 9 0	89 19 1	11 3 10	1301 11 11	26 2 0	1 15 0

Tuberculosis.

1940.

	New Cases.				Deaths.			
Age periods	Pulmonary		Non-Pulmonary		Pulmonary		Non-Pulmonary	
	M.	F.	M.	F.	M.	F.	M.	F.
0.1 ..	0	0	0	0	0	0	0	0
1-5 ..	0	0	0	0	0	0	0	0
5.15 ..	0	0	6	1	0	1	2*	1
15-25 ..	6	5	0	0	6	1	0	0
25-35 ..	4	3	2	0	1	2	1	0
35-45 ..	3	1	0	0	1	1	0	1
45-55 ..	1	1	0	0	0	1	0	0
55-65 ..	2	0	0	0	2	0	0	0
65 and upwards ..	0	0	0	0	0	0	0	0
Totals ..	16	10	8	1	10	6	3	2
Registrar-General's figures:					10	6	3	2

*These two cases died in Hospital and had not been previously notified.

1941.

	New Cases.				Deaths.			
Age periods	Pulmonary		Non-Pulmonary		Pulmonary		Non-Pulmonary	
	M.	F.	M.	F.	M.	F.	M.	F.
0.1 ..	0	0	1	0	0	0	0	0
1.5 ..	0	0	1	2	0	0	1	1
5.15 ..	0	1	1	2	0	0	0	0
15-25 ..	3	2	0	0	0	1	0	0
25-35	1	0	1	0	5	4	0	0
35-45 ..	3	3	0	0	1	1	0	0
45-55 ..	2	0	1	0	0	1	0	0
55-65 ..	0	0	0	0	2	1	0	0
65 and upwards ..	1	0	0	0	0	0	0	0
Totals ..	10	6	5	4	8	8	1	1
Registrar-General's figures					9	6	1	3

One fatal case had not been previously notified.

	Males		Females		
On Register	P.	N.P.	P.	N.P.	Total
31/12/40 ..	145	50	146	36	377
31/12/41 ..	129	47	140	37	353

The decrease in the total cases on the Register is accounted for by the number of cases removed as recovered or left the district.

No action was taken under the Public Health (Prevention of Tuberculosis) Regulations, 1925, or under Section 172 of the Public Health Act, 1936.

Scarlet Fever, 1941.

There were 54 cases, of which 16 were treated in Hospital. The cases occurred throughout the year, the maximum prevalence being in the Autumn and Winter.

Diphtheria Prophylaxis, 1941.

The first Immunisation Session was held on January 9th. By the end of March 1,038 children under 5, and 4,260 children age 5—15, had received both injections. This satisfactory progress was made possible by the willing cooperation of General Practitioners, local Nurses, voluntary workers, Head Teachers and Civil Defence personnel, in addition to the staff of the department.

From September a special letter was sent to all parents as their child reached the age of one year. Facts about Immunisation and the details of Immunisation Sessions in the district were given. This was followed up by a visit from one of the Health Visitors.

Dosage. As recorded in the notes for 1940 I considered the suggested doses of 0.1 c.c. and 0.3 c.c. rather small. From various articles published during 1941 it appeared there was some ground for my doubts. In September, I increased the dosage to 0.2 c.c. followed by 0.4 c.c. In addition, I decided to give a third injection to immunised infants entering schools, on and after January 1st, 1942. This measure, it was hoped, would compensate for the relative weakness of the antigen supplied in the early stages of the Scheme.

The following table shows the total number immunised during the year.

Completed Treatment:

	Under 5's	Sutton Schools	Other Schools	Evacuees	14's & 15's	Adults	Totals
Scheme ..	1642	4350	64	466	254	30	6806
Private ..	88	62	26	1	1	0	178
Totals ..	1730	4412	90	467	255	30	6984
First Injections —Scheme.							
(a) Not due to return before January, 1942 ..	49	11	0	6	1	1	68
(b) Left District after 1st Injection	4	19	0	28	0	0	51
(c) Failed to return after 1st Injection	38	12	0	0	3	0	53
Total % Failed to return for 2nd Injection. (c) above	2.1%	.27%	0	0	1.1%	0	.75%

Proportion of Children Treated:—	Treatment Completed	Treatment Commenced
School Children (as % of total on Registers)	85.5%	85.9%

Age Groups (as % of Live Births,
less deaths under 1 year—Registrar General's Figures):—

		Treatment Completed.	Treatment Commenced.
Children Born	1936	73%	75%
do.	1937	66%	69%
do.	1938	63%	65%
do.	1939	68%	70%
do.	1940	38%	45%

Total Nett Cost During Year .. .. .. £423 17s. 10d.

By the end of the year, the statistics kept by the Examining Surgeon showed that of children under 16 years entering industry, 20% of those who had left School before the Scheme commenced had since been immunised, and 80% of those who had left school after that time had been immunised at School.

It was found impracticable to Schick test as a routine or on selected groups of children.

Diphtheria, 1941.

Fifty-five cases were notified, 32 in January and 13 in November and December. Four were fatal.

Forty-five cases were removed to Hospital. 516 swabs were examined at a cost of £77 8s. 0d. and the supply of anti-toxin cost £42 12s. 9d.

Four of the cases had received two injections 0.1 c.c. and 0.3 c.c. of A.P.T. and eight had had one injection only.

In the four cases who had two injections, diphtheria was notified 5—10 months after the second injection. One case had a definite membrane on both tonsils which disappeared in two days without any treatment. The others were diphtheria of moderate severity All recovered.

In the eight cases who had received one injection, diphtheria was reported from 2—38 days thereafter. One of the cases, who had been in hospital for 29 days, died at home 18 days after discharge from hospital, and the cause of death was returned as Cardiac Failure due to Diphtheria. His condition on discharge from hospital was reported to be normal.

Cases Notified and Deaths.

	Immunised		Not Immunised	
	Cases	Deaths	Cases	Deaths
Under 5 Years	0	0	8	2
5—15 Years	4	0	24	1
16 Years and Over	0	0	19	1
Totals	4	0	51	4

% Rates of Incidence and Case Mortality.

	Cases	Deaths	Cases	Deaths
	Immunised		Not Immunised	
Under 5 Years	0%	0%	0.54%	25%
5—15 Years	0.12%*	0%	2.1%	4%

*This figure of 0.12% is probably too high. The crude figure of 0.08% has been adjusted to make allowance for the first four months of the year during which Immunity was being developed.

Cerebro-Spinal Meningitis, 1941.

Four cases were notified, two being non-civilian. The two civilian cases were removed to Lodge Moor Hospital, both recovered.

Measles and Whooping Cough, 1941.

Only 23 cases of measles and 85 cases of whooping cough were notified; of the latter, however, four died.

Enteric Fever, 1941.

Two cases of Paratyphoid B. occurred in September. The cases were in the same household, one case having the usual symptoms, including the rash, and the other being ambulant and only complaining of some headache. Serological and bacteriological tests were positive in both cases.

One was removed to Lodge Moor Hospital.

Puerperal Pyrexia, 1941.

Four cases were notified, three of whom were admitted to Hospital. All recovered.

	£	s.	d.
Hospital Charges	7	10	2
Amount to be recovered under scale ..	1	4	4
Cost to Council	6	5	10

Food Poisoning, 1941.

In August a case of Gastro Enteritis was investigated as a possible food poisoning. All Laboratory Tests were negative, and the patient eventually died. After a post-mortem the cause of death was certified as infective endocarditis.

Scabies Order.

The Council approved any measures considered by the Medical Officer of Health necessary and practicable. Lack of suitable premises prevented any effective action during 1941.